

Table 22.1  
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,  
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-78	-2.2	1978-84	1.3*	1984-89	-1.5	1989-01	0.0	2001-08	1.7*			1.3*	1.7*
White	1975-79	-1.9	1979-84	1.7	1984-87	-2.5	1987-99	-0.1	1999-08	1.6*			1.6*	1.6*
Black	1975-08	-0.2											-0.2	-0.2
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-01	0.0	2001-08	1.5*									1.2*	1.5*
White	1992-00	0.1	2000-08	1.4*									1.2*	1.4*
Black	1992-01	-1.7*	2001-08	1.5									0.8	1.5
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-78	-2.2	1978-84	1.3*	1984-89	-1.4	1989-00	0.0	2000-08	1.3*			1.1*	1.3*
White	1975-78	-2.5	1978-84	1.0	1984-95	-0.8*	1995-08	1.0*					1.0*	1.0*
Black	1975-08	-0.2											-0.2	-0.2
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-00	-0.1	2000-08	1.1*									0.9*	1.1*
White	1992-08	0.6*											0.6*	0.6*
White NH <sup>ef</sup>	1992-00	0.2	2000-08	1.2*									1.1*	1.2*
Black	1992-01	-1.6*	2001-08	1.1									0.5	1.1
Black NH <sup>ef</sup>	1992-01	-1.7*	2001-08	1.3									0.6	1.3
API <sup>e</sup>	1992-08	0.5*											0.5*	0.5*
AI/AN <sup>eg</sup>	1992-08	3.1*											3.1*	3.1*
Hispanic <sup>f</sup>	1992-08	0.1											0.1	0.1
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2008</u>														
All Races														
White														
White NH <sup>ef</sup>														
Black														
Black NH <sup>ef</sup>														
API <sup>e</sup>														
AI/AN <sup>eg</sup>														
Hispanic <sup>f</sup>														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>a</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

<sup>b</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

<sup>c</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

<sup>e</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

<sup>f</sup> Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

<sup>g</sup> Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

\* The APC/AAPC is significantly different from zero ( $p < .05$ ).

- Joinpoint regression line analysis could not be performed on data series.

Table 22.2  
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,  
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-93	-0.9*	1993-03	0.3	2003-08	2.2*							1.4*	2.2*
White	1975-95	-1.0*	1995-08	1.2*									1.2*	1.2*
Black	1975-08	-0.5*											-0.5*	-0.5*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-02	0.0	2002-08	1.8*									1.2*	1.8*
White	1992-08	0.8*											0.8*	0.8*
Black	1992-08	-0.5											-0.5	-0.5
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-81	-1.8*	1981-85	1.2	1985-90	-2.2	1990-02	0.1	2002-08	1.6*			1.1*	1.6*
White	1975-95	-0.9*	1995-08	1.1*									1.1*	1.1*
Black	1975-08	-0.6*											-0.6*	-0.6*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-02	0.0	2002-08	1.4*									0.9*	1.4*
White	1992-08	0.7*											0.7*	0.7*
White NH <sup>ef</sup>	1992-08	0.8*											0.8*	0.8*
Black	1992-08	-0.6											-0.6	-0.6
Black NH <sup>ef</sup>	1992-08	-0.5											-0.5	-0.5
API <sup>e</sup>	1992-08	-0.1											-0.1	-0.1
AI/AN <sup>eg</sup>	1992-08	3.4*											3.4*	3.4*
Hispanic <sup>f</sup>	1992-08	0.1											0.1	0.1
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2008</u>														
All Races														
White														
White NH <sup>ef</sup>														
Black														
Black NH <sup>ef</sup>														
API <sup>e</sup>														
AI/AN <sup>eg</sup>														
Hispanic <sup>f</sup>														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>a</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

<sup>b</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

<sup>c</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

<sup>e</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

<sup>f</sup> Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

<sup>g</sup> Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

\* The APC/AAPC is significantly different from zero ( $p < .05$ ).

- Joinpoint regression line analysis could not be performed on data series.

Table 22.3  
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,  
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1999-08	2004-08
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-84	1.3*	1984-00	-0.3	2000-08	1.7*							1.4*	1.7*
White	1975-84	1.2*	1984-99	-0.4*	1999-08	1.6*							1.6*	1.6*
Black	1975-08	0.1											0.1	0.1
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-00	-0.1	2000-08	1.4*									1.2*	1.4*
White	1992-00	0.0	2000-08	1.4*									1.3*	1.4*
Black	1992-08	-0.1											-0.1	-0.1
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2008</u>														
All Races	1975-84	1.3*	1984-99	-0.4*	1999-08	1.2*							1.2*	1.2*
White	1975-84	1.2*	1984-99	-0.4	1999-08	1.3*							1.3*	1.3*
Black	1975-08	0.1											0.1	0.1
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2008</u>														
All Races	1992-08	0.5*											0.5*	0.5*
White	1992-01	-0.1	2001-05	2.2	2005-08	-0.8							0.7	0.0
White NH <sup>ef</sup>	1992-99	-0.2	1999-08	1.3*									1.3*	1.3*
Black	1992-08	-0.3											-0.3	-0.3
Black NH <sup>ef</sup>	1992-08	-0.3											-0.3	-0.3
API <sup>e</sup>	1992-08	1.1*											1.1*	1.1*
AI/AN <sup>eg</sup>	1992-08	2.7											2.7	2.7
Hispanic <sup>f</sup>	1992-08	0.1											0.1	0.1
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2008</u>														
All Races														
White														
Black														
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2008</u>														
All Races														
White														
White NH <sup>ef</sup>														
Black														
Black NH <sup>ef</sup>														
API <sup>e</sup>														
AI/AN <sup>eg</sup>														
Hispanic <sup>f</sup>														

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>a</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

<sup>b</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

<sup>c</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>d</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

<sup>e</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

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<sup>g</sup> Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

\* The APC/AAPC is significantly different from zero (p<.05).

- Joinpoint regression line analysis could not be performed on data series.

Table 22.4  
Cancer of the Pancreas (Invasive)

Delay-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	11.84	15.61	9.12	11.69	15.65	8.89	15.90	18.08	13.91
1976	11.99	14.82	9.90	11.76	14.50	9.74	17.61	22.68	13.97
1977	11.90	14.81	9.83	11.62	14.58	9.54	17.12	19.44	15.25
1978	11.07	14.06	8.85	10.83	13.90	8.60	15.14	20.02	11.53
1979	11.52	14.15	9.65	11.21	13.84	9.39	16.08	19.14	13.68
1980	11.52	14.20	9.61	11.07	13.70	9.18	17.94	21.76	15.53
1981	11.68	13.54	10.17	11.39	13.26	9.91	17.18	20.86	14.10
1982	11.71	13.81	10.17	11.41	13.47	9.94	16.86	20.99	13.96
1983	12.19	14.66	10.44	11.75	14.07	10.12	18.13	23.05	14.90
1984	12.22	13.94	10.93	12.03	13.87	10.64	17.19	18.36	16.34
1985	12.10	14.35	10.50	11.70	13.60	10.34	18.79	25.28	14.55
1986	11.68	13.78	10.21	11.37	13.54	9.82	17.32	20.16	15.59
1987	11.61	13.81	10.10	11.09	13.38	9.55	18.43	18.98	17.93
1988	11.65	13.70	10.20	11.11	13.35	9.57	18.48	19.55	17.32
1989	11.34	12.88	10.08	10.99	12.66	9.64	14.99	16.05	13.97
1990	11.28	12.81	10.06	11.03	12.46	9.85	15.20	18.83	12.64
1991	11.40	12.90	10.23	11.04	12.61	9.79	17.06	18.21	16.25
1992	11.63	13.23	10.34	11.34	12.92	10.02	17.35	19.78	15.76
1993	10.97	12.55	9.70	10.52	11.98	9.31	16.90	18.90	15.19
1994	11.38	13.26	9.92	10.90	12.35	9.76	17.46	21.54	14.50
1995	11.13	12.73	9.96	10.71	12.31	9.58	18.12	20.32	16.32
1996	11.29	12.92	9.93	10.91	12.49	9.57	17.08	19.70	14.89
1997	11.50	13.07	10.21	11.05	12.58	9.76	17.85	19.37	16.50
1998	11.49	13.12	10.24	11.27	13.02	9.88	14.77	16.24	13.91
1999	11.11	12.59	9.83	10.71	12.24	9.35	16.72	19.56	14.72
2000	11.43	13.35	9.84	11.10	12.96	9.59	15.71	18.20	13.28
2001	11.33	13.16	10.00	11.07	13.07	9.55	14.28	15.48	13.36
2002	11.76	13.06	10.57	11.60	13.30	10.08	16.15	14.97	16.25
2003	11.63	12.89	10.59	11.43	12.69	10.35	16.11	17.16	15.33
2004	11.97	13.92	10.34	11.76	13.61	10.20	16.02	19.51	13.38
2005	12.03	13.75	10.64	11.73	13.45	10.31	16.96	18.51	16.20
2006	12.54	14.21	11.19	12.43	14.37	10.83	16.66	18.15	15.36
2007	12.45	14.35	10.90	12.29	14.36	10.59	15.72	16.68	14.88
2008	12.83	14.66	11.33	12.51	14.38	10.95	17.63	19.83	16.11

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(http://surveillance.cancer.gov/delay/\)](http://surveillance.cancer.gov/delay/).

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 22.5  
Cancer of the Pancreas (Invasive)

Age-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	11.84	15.61	9.12	11.69	15.65	8.89	15.90	18.08	13.91
1976	11.99	14.82	9.90	11.76	14.50	9.74	17.61	22.68	13.97
1977	11.90	14.81	9.83	11.62	14.58	9.54	17.12	19.44	15.25
1978	11.07	14.06	8.85	10.83	13.90	8.60	15.14	20.02	11.53
1979	11.52	14.15	9.65	11.21	13.84	9.39	16.08	19.14	13.68
1980	11.52	14.20	9.61	11.07	13.70	9.18	17.94	21.76	15.53
1981	11.68	13.54	10.17	11.39	13.26	9.91	17.18	20.86	14.10
1982	11.71	13.81	10.17	11.41	13.47	9.94	16.86	20.99	13.96
1983	12.19	14.66	10.44	11.75	14.07	10.12	18.13	23.05	14.90
1984	12.22	13.94	10.93	12.03	13.87	10.64	17.19	18.36	16.34
1985	12.10	14.35	10.50	11.70	13.60	10.34	18.79	25.28	14.55
1986	11.68	13.78	10.21	11.37	13.54	9.82	17.32	20.16	15.59
1987	11.61	13.81	10.10	11.09	13.38	9.54	18.43	18.98	17.93
1988	11.65	13.70	10.20	11.11	13.35	9.57	18.48	19.55	17.32
1989	11.34	12.88	10.08	10.98	12.66	9.64	14.99	16.05	13.97
1990	11.28	12.81	10.06	11.02	12.46	9.84	15.20	18.82	12.63
1991	11.40	12.90	10.23	11.04	12.61	9.79	17.06	18.20	16.24
1992	11.63	13.23	10.34	11.33	12.92	10.02	17.34	19.77	15.75
1993	10.97	12.55	9.70	10.51	11.98	9.31	16.89	18.90	15.18
1994	11.38	13.25	9.92	10.90	12.34	9.75	17.45	21.53	14.49
1995	11.13	12.72	9.96	10.71	12.31	9.57	18.11	20.31	16.31
1996	11.29	12.92	9.92	10.90	12.48	9.56	17.06	19.68	14.88
1997	11.49	13.06	10.20	11.04	12.57	9.75	17.83	19.35	16.48
1998	11.48	13.11	10.23	11.25	13.00	9.86	14.75	16.22	13.89
1999	11.09	12.58	9.82	10.70	12.22	9.33	16.70	19.53	14.69
2000	11.41	13.33	9.83	11.08	12.93	9.57	15.68	18.17	13.24
2001	11.31	13.13	9.97	11.04	13.04	9.52	14.24	15.45	13.31
2002	11.73	13.03	10.54	11.56	13.25	10.04	16.09	14.92	16.18
2003	11.59	12.85	10.55	11.37	12.64	10.30	16.03	17.09	15.25
2004	11.92	13.86	10.29	11.69	13.54	10.14	15.92	19.41	13.29
2005	11.95	13.67	10.57	11.64	13.36	10.22	16.82	18.38	16.06
2006	12.44	14.10	11.08	12.31	14.24	10.71	16.49	17.98	15.20
2007	12.31	14.20	10.77	12.13	14.20	10.44	15.51	16.48	14.66
2008	12.42	14.22	10.95	12.07	13.91	10.54	17.00	19.17	15.51
1975-2008	11.67	13.58	10.19	11.34	13.29	9.83	16.67	18.95	14.94

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).  
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 22.7  
Cancer of the Pancreas (Invasive)SEER Incidence<sup>a</sup> and U.S. Death<sup>b</sup> Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2004-2008									
All ages	12.0	13.6	10.7	11.9	13.5	10.5	15.9	17.1	14.8
Under 65	4.0	4.6	3.3	3.9	4.5	3.3	5.7	7.0	4.7
65 and over	67.6	75.3	61.9	67.1	75.8	60.7	85.8	86.9	84.2
All ages (IARC world std) <sup>c</sup>	7.2	8.3	6.3	7.1	8.2	6.2	9.8	11.0	8.8
Age-Specific Rates, 2004-2008									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	0.1	-	-	0.1	-	-	-	-	-
25-29	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-
30-34	0.4	0.4	0.5	0.4	0.3	0.5	0.7	-	-
35-39	1.0	1.1	0.8	1.0	1.1	0.8	0.9	-	-
40-44	2.4	2.7	2.1	2.3	2.6	2.0	2.9	3.1	2.6
45-49	5.5	6.3	4.7	5.4	6.2	4.5	7.4	7.6	7.2
50-54	10.6	12.8	8.4	10.2	12.2	8.3	16.5	21.5	12.3
55-59	18.7	22.2	15.4	18.4	21.5	15.5	27.3	35.8	20.4
60-64	30.0	35.1	25.3	29.4	34.5	24.5	44.6	52.8	38.1
65-69	42.6	50.2	35.9	42.3	50.5	35.0	55.7	63.8	49.6
70-74	59.7	67.2	53.6	59.2	67.9	52.0	75.5	79.6	72.6
75-79	74.7	81.3	69.9	75.3	82.5	69.9	90.2	91.4	89.4
80-84	91.5	100.7	85.7	91.1	102.1	84.1	108.9	109.5	108.6
85+	98.9	107.2	95.1	96.6	106.3	92.1	139.3	118.6	147.2
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2004-2008									
All ages									
Under 65									
65 and over									
All ages (IARC world std) <sup>c</sup>									
Age-Specific Rates, 2004-2008									
<1									
1-4									
5-9									
10-14									
15-19									
20-24									
25-29									
30-34									
35-39									
40-44									
45-49									
50-54									
55-59									
60-64									
65-69									
70-74									
75-79									
80-84									
85+									

<sup>a</sup> SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

<sup>c</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

- Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 22.8  
Cancer of the Pancreas (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 <sup>a</sup>	-	-	-	1	1	2	1	0	3
1970-1973 <sup>a</sup>	-	-	-	2	2	2	2	0	3
1975-1977 <sup>b</sup>	2.4	2.6	2.2	2.5	2.6	2.3	2.3	2.6	1.9
1978-1980 <sup>b</sup>	2.8	2.7	3.0	2.5	2.6	2.5	5.6	4.1	7.0
1981-1983 <sup>b</sup>	2.8	2.4	3.2	2.6	2.2	3.0	3.6	3.7	3.2
1984-1986 <sup>b</sup>	2.9	2.3	3.4	2.6	2.1	3.1	4.6	3.9	5.1
1987-1989 <sup>b</sup>	3.5	3.3	3.8	3.2	3.1	3.3	5.5	5.1	5.8
1990-1992 <sup>b</sup>	4.3	4.1	4.5	4.4	4.2	4.6	3.7	3.2	4.1
1993-1995 <sup>b</sup>	4.0	3.7	4.3	3.9	3.6	4.3	3.4	3.3	3.4
1996-2000 <sup>b</sup>	4.6	4.7	4.5	4.3	4.8	3.8	4.6	3.6	5.4
2001-2007 <sup>b</sup>	5.6 <sup>e</sup>	5.3 <sup>e</sup>	5.9 <sup>e</sup>	5.9 <sup>e</sup>	5.8 <sup>e</sup>	6.1 <sup>e</sup>	3.8 <sup>e</sup>	3.3 <sup>e</sup>	4.3 <sup>e</sup>
5-Year Period Survival (Percent) <sup>cd</sup>									
2007	5.8	5.2	6.4	5.8	5.3	6.3	4.9	3.9	5.8
Stage Distribution (%) 2001-2007 <sup>c</sup>									
All Stages									
Number of cases	47,456	23,226	24,230	38,603	19,122	19,481	5,236	2,327	2,909
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	8	7	9	8	7	9	9	7	10
Regional	27	26	27	27	26	27	25	25	26
Distant	53	56	50	52	55	49	56	59	53
Unstaged	13	11	14	13	11	15	11	8	12
5-Year Relative Survival (Percent), 2001-2007 <sup>c</sup>									
Age at Diagnosis:									
Ages <45	21.7	15.8	28.9	20.8	15.7	27.2	20.2	14.2	27.2 <sup>f</sup>
Ages 45-54	8.9	7.6	10.9	8.7	8.0	9.8	8.1	5.6	11.2
Ages 55-64	6.2	5.2	7.6	6.5	5.5	7.9	4.2	2.4	6.3
Ages 65-74	4.9	4.6	5.2	5.1	4.9	5.3	2.9	2.6	2.9
Ages 75+	3.0	3.1	2.9	3.2	3.0	3.3	1.5	3.3	1.1
Ages <65	8.5	6.9	10.8	8.4	7.1	10.4	7.0	4.6	9.9
Ages 65+	3.8	3.8	3.7	3.9	3.9	3.9	2.2	2.7	1.9
Stage:									
All Stages	5.5	5.1	5.8	5.5	5.2	5.7	4.4	3.8	5.0
Localized	21.5	19.6	23.0	21.7	20.4	22.5	15.2	11.3	17.8
Regional	8.6	8.4	8.8	8.7	8.6	8.9	7.5	6.9	8.0
Distant	1.8	1.9	1.7	1.8	1.9	1.7	1.4	1.4	1.3
Unstaged	4.2	4.6	3.8	4.1	4.5	3.7	5.1	5.2	5.0

<sup>a</sup> Based on End Results data from a series of hospital registries and one population-based registry.<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).  
Based on follow-up of patients into 2008.<sup>c</sup> SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey).  
Based on follow-up of patients into 2008.<sup>d</sup> Period survival provides a 2007 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2005-2007: 0-1 year survival), (2004-2006: 1-2 year survival), (2003-2005: 2-3 year survival), (2002-2004: 3-4 year survival), (2001-2003: 4-5 years survival).  
The difference between 1975-1977 and 2001-2007 is statistically significant (p<.05).<sup>e</sup> The standard error is between 5 and 10 percentage points.<sup>f</sup> The standard error is greater than 10 percentage points.<sup>g</sup> -  
Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 22.9  
Cancer of the Pancreas (Invasive)  
SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males and Females

Survival Time	Year of Diagnosis																				
	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
1-year	15.1	17.0	18.2	19.3	20.0	20.3	18.2	19.6	18.5	19.9	21.4	20.8	23.5	23.3	24.8	26.2	23.9	24.1	27.9	26.8	28.7
2-year	6.1	6.5	7.0	8.2	9.2	9.0	8.4	9.1	8.4	9.6	10.0	8.9	10.6	10.9	11.6	12.1	11.3	11.9	12.7	13.2	
3-year	3.7	4.1	4.8	5.3	6.4	5.8	5.2	6.5	5.3	6.4	7.0	5.8	6.7	7.3	7.2	8.5	7.4	8.3	8.6		
4-year	3.0	3.3	3.8	4.1	5.2	5.1	4.3	5.2	4.0	4.8	5.6	4.5	5.6	6.0	6.0	6.9	5.7	6.3			
5-year	2.5	2.9	3.3	3.7	4.6	4.6	3.5	4.8	3.5	4.2	5.0	3.8	5.0	5.0	4.9	6.1	4.8				
6-year	2.3	2.6	3.0	3.5	4.2	4.6	3.2	4.2	3.2	3.8	4.5	3.7	4.5	4.5	4.6	5.6					
7-year	2.1	2.3	2.7	3.1	3.9	4.0	3.0	3.8	3.1	3.5	4.3	3.4	4.3	4.1	4.1						
8-year	1.9	2.1	2.5	3.1	3.6	3.8	3.0	3.3	2.7	3.4	4.0	3.1	4.0	3.6							
9-year	1.8	2.0	2.2	2.8	3.6	3.5	2.8	3.2	2.6	3.3	3.9	2.7	3.7								
10-year	1.7	1.9	2.2	2.5	3.3	3.4	2.5	3.0	2.5	3.2	3.8	2.7									
11-year	1.7	1.8	2.1	2.4	3.0	3.1	2.4	2.8	2.4	2.9	3.6										
12-year	1.7	1.7	2.1	2.4	2.9	3.0	2.2	2.6	2.3	2.8											
13-year	1.6	1.6	2.0	2.3	2.9	2.8	2.2	2.5	2.1												
14-year	1.6	1.6	1.9	2.1	2.7	2.8	2.0	2.5													
15-year	1.5	1.5	1.8	2.0	2.3	2.8	2.0														
16-year	1.5	1.4	1.7	2.0	2.1	2.5															
17-year	1.4	1.4	1.7	1.9	2.1																
18-year	1.3	1.3	1.7	1.9																	
19-year	1.2	1.3	1.6																		
20-year	1.2	1.3																			

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 22.10  
Cancer of the Pancreas (Invasive)

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	15.0	16.0	17.8	19.1	19.6	17.9	16.9	20.0	17.8	21.3	22.9	20.2	24.5	23.4	23.9	26.0	25.5	26.1	26.3	27.9	29.1
2-year	6.0	6.1	6.5	8.4	8.8	8.7	7.5	9.5	7.4	11.1	10.0	9.1	9.9	11.4	12.3	11.3	11.5	12.5	11.6	13.7	
3-year	3.5	3.8	4.4	5.2	6.4	5.5	4.6	7.4	4.2	7.3	6.9	5.7	6.3	7.0	7.7	8.2	7.3	8.2	7.5		
4-year	2.9	3.0	3.3	3.7	5.3	4.9	3.4	5.7	3.5	5.8	5.6	4.5	5.5	5.9	6.3	6.8	5.5	5.6			
5-year	2.5	2.5	2.9	3.2	4.7	4.2	2.6	5.3	2.9	5.1	4.7	3.9	4.9	5.0	5.3	6.0	4.2				
6-year	2.3	2.3	2.5	3.2	4.3	4.2	2.3	4.7	2.6	4.7	3.9	3.7	4.1	4.7	4.9	5.2					
7-year	2.3	1.9	2.3	2.9	3.8	3.5	2.0	4.4	2.6	4.2	3.6	3.4	3.9	4.3	4.5						
8-year	2.0	1.7	2.1	2.9	3.5	3.1	1.9	3.7	2.4	4.2	3.4	3.2	3.9	3.6							
9-year	1.9	1.6	1.8	2.6	3.5	3.0	1.8	3.5	2.2	4.0	3.4	2.8	3.6								
10-year	1.7	1.5	1.7	2.3	3.2	3.0	1.5	3.0	2.1	3.8	3.2	2.8									
11-year	1.7	1.5	1.6	2.2	3.1	3.0	1.3	3.0	2.0	3.2	2.9										
12-year	1.6	1.5	1.6	2.2	3.1	3.0	1.1	2.8	1.8	3.0											
13-year	1.5	1.4	1.5	2.2	3.1	3.0	1.1	2.5	1.7												
14-year	1.5	1.4	1.5	2.0	3.0	3.0	0.9	2.4													
15-year	1.5	1.3	1.3	2.0	2.9	3.0	0.9														
16-year	1.5	1.3	1.3	2.0	2.7	2.4															
17-year	1.4	1.3	1.3	2.0	2.5																
18-year	1.2	1.3	1.2	2.0																	
19-year	1.1	1.3	1.2																		
20-year	1.0	1.2																			

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 22.11  
Cancer of the Pancreas (Invasive)

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Survival Time																					
1-year	15.2	18.1	18.4	19.5	20.5	22.6	19.3	19.1	19.2	18.5	20.0	21.3	22.6	23.2	25.6	26.3	22.4	22.0	29.5	25.8	28.2
2-year	6.3	6.9	7.5	8.0	9.5	9.3	9.2	8.7	9.3	8.3	10.0	8.7	11.2	10.4	11.0	12.8	11.2	11.3	13.9	12.8	
3-year	3.9	4.5	5.2	5.5	6.3	6.2	5.8	5.6	6.3	5.6	7.2	5.9	7.1	7.6	6.8	8.7	7.5	8.4	9.8		
4-year	3.0	3.6	4.3	4.4	5.2	5.3	5.2	4.7	4.4	4.0	5.5	4.4	5.7	6.2	5.7	6.9	5.8	7.1			
5-year	2.4	3.2	3.7	4.1	4.5	4.9	4.3	4.4	4.1	3.4	5.2	3.7	5.2	4.9	4.5	6.2	5.3				
6-year	2.3	2.9	3.4	3.7	4.2	4.9	4.1	3.6	3.7	3.0	4.9	3.7	5.0	4.2	4.2	6.0					
7-year	2.0	2.8	3.1	3.2	4.0	4.3	3.9	3.2	3.4	2.8	4.9	3.4	4.6	3.8	3.7						
8-year	1.8	2.5	2.8	3.2	3.7	4.3	3.9	3.0	2.9	2.6	4.6	2.9	4.1	3.5							
9-year	1.8	2.3	2.7	2.9	3.6	3.9	3.6	2.8	2.9	2.5	4.4	2.6	3.8								
10-year	1.7	2.2	2.6	2.6	3.4	3.5	3.5	2.8	2.8	2.5	4.4	2.5									
11-year	1.7	2.0	2.6	2.6	2.8	3.0	3.3	2.6	2.7	2.5	4.4										
12-year	1.7	1.9	2.5	2.5	2.7	2.7	3.1	2.4	2.7	2.5											
13-year	1.6	1.8	2.4	2.2	2.7	2.7	3.1	2.4	2.4												
14-year	1.5	1.7	2.4	2.1	2.4	2.7	3.0	2.4													
15-year	1.4	1.6	2.3	1.9	1.6	2.5	2.9														
16-year	1.4	1.5	2.0	1.8	1.6	2.5															
17-year	1.3	1.5	2.0	1.8	1.6																
18-year	1.3	1.4	2.0	1.6																	
19-year	1.3	1.4	2.0																		
20-year	1.3	1.4																			

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 22.15  
Cancer of the Pancreas (Invasive)

SEER Incidence and U.S. Mortality  
Age-Adjusted Rates and Trends<sup>a</sup>  
By Race/Ethnicity and Sex

SEER Incidence	SEER 17 Areas <sup>b</sup>			SEER 13 Areas <sup>b</sup>			SEER 9 Areas <sup>b</sup>		
	Rate 2004-2008			Trend 1999-2008 <sup>c</sup>			Trend 1999-2008 <sup>d</sup>		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	12.0	13.6	10.7	0.9*	0.9*	0.5*	1.1*	1.1*	1.2*
White	11.9	13.5	10.5	0.6*	0.7*	0.7	1.0*	1.1*	1.3*
White Hispanic <sup>e</sup>	10.8	11.3	10.2	0.0	-0.1	-0.1	-	-	-
White Non-Hispanic <sup>e</sup>	12.0	13.8	10.6	1.1*	0.8*	1.3*	-	-	-
Black	15.9	17.1	14.8	0.5	-0.6	-0.3	-0.2	-0.6*	0.1
Asian/Pacific Islander	9.5	10.6	8.6	0.5*	-0.1	1.1*	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	10.6	11.4	10.0	-	-	-	-	-	-
Hispanic <sup>e</sup>	10.5	11.0	10.1	0.1	0.1	0.1	-	-	-

U.S. Mortality <sup>g</sup>	Rate 2004-2008			Trend 1999-2008 <sup>h</sup>		
	Rate per 100,000 persons			AAPC (%)		
	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females
All Races						
White						
White Hispanic <sup>e</sup>						
White Non-Hispanic <sup>e</sup>						
Black						
Asian/Pacific Islander						
Amer Ind/Alaska Nat						
Total U.S.						
CHSDA Counties						
Non-CHSDA Counties						
Hispanic <sup>e</sup>						

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends

are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

c The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2008.

d The 1999-2008 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2008.

e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2008 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1999-2008 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

f Incidence data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

g US Mortality Files, National Center for Health Statistics, CDC.

h The 1999-2008 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2008.

\* The APC is significantly different from zero (p<.05).

Table 22.16  
Cancer of the Pancreas (Invasive)

Age-Adjusted SEER Incidence Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates<sup>a</sup>, 2004-2008</u>									
Atlanta & Rural Georgia	10.94	12.29	9.78	10.09	11.23	9.04	13.55	15.99	11.88
Atlanta	10.91	12.42	9.64	10.14	11.50	8.91	13.43	15.84	11.78
Rural Georgia	11.55	11.05	11.81	9.68	7.79	11.18	15.86	19.47	13.22
California	11.48	12.77	10.42	11.58	12.97	10.42	15.80	16.00	15.34
Greater Bay Area	11.86	13.45	10.56	12.30	14.12	10.80	16.17	15.74	16.27
San Francisco-Oakland	11.88	13.57	10.48	12.32	14.31	10.66	15.84	15.48	15.94
San Jose-Monterey	11.85	13.24	10.72	12.27	13.80	11.06	18.97	17.24	19.39
Los Angeles	11.11	12.29	10.16	10.91	12.13	9.93	15.48	15.81	14.92
Greater California	11.52	12.75	10.50	11.63	12.97	10.51	16.21	16.61	15.56
Connecticut	13.70	16.17	11.72	13.44	15.93	11.43	17.79	21.85	15.12
Detroit	14.52	16.99	12.60	13.50	16.14	11.38	19.19	21.81	17.33
Hawaii	12.59	14.17	11.25	11.43	13.28	10.12	-	-	-
Iowa	11.38	13.33	9.77	11.28	13.23	9.68	21.13	24.72	17.68
Kentucky	11.52	13.02	10.27	11.40	13.03	10.06	14.40	14.26	13.92
Louisiana	13.30	14.67	12.06	12.38	13.91	11.02	16.49	17.65	15.35
New Jersey	12.79	14.81	11.21	12.79	14.90	11.14	14.56	15.80	13.37
New Mexico	10.50	11.78	9.42	10.52	11.89	9.36	10.14	-	-
Seattle-Puget Sound	12.34	13.86	11.11	12.42	13.97	11.14	14.24	14.88	14.35
Utah	9.57	10.70	8.59	9.62	10.79	8.61	-	-	-
9 SEER Areas <sup>b</sup>	12.21	14.02	10.73	11.97	13.85	10.41	16.36	18.27	14.97
11 SEER Areas <sup>b</sup>	11.95	13.59	10.60	11.77	13.50	10.34	16.16	17.58	15.02
13 SEER Areas <sup>b</sup>	11.95	13.59	10.62	11.76	13.48	10.34	16.15	17.60	14.99
17 SEER Areas <sup>b</sup>	12.00	13.56	10.72	11.87	13.53	10.51	15.86	17.06	14.77

<sup>a</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)

<sup>b</sup> The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 22.21  
Cancer of the Pancreas (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2008  
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <18 <sup>e</sup>	0 to <33 <sup>e</sup>	>=33 <sup>g</sup>	Complete <sup>h</sup>	
Race	Sex											
All Races <sup>b</sup>	Both Sexes	24,630	3,944	1,990	1,127	530	343	32,838	34,305	352	34,657	
	Males	12,189	1,979	854	543	176	158	16,086	16,665	146	16,811	
	Females	12,441	1,965	1,136	584	354	185	16,752	17,640	206	17,846	
White <sup>b</sup>	Both Sexes	21,106	3,222	1,566	874	401	293	27,872	28,983	294	29,277	
	Males	10,791	1,766	663	467	132	140	14,010	14,477	134	14,611	
	Females	10,315	1,456	903	407	269	153	13,862	14,506	160	14,666	
Black <sup>b</sup>	Both Sexes	2,359	467	259	205	91	42	3,373	3,662	129	3,791	
	Males	878	132	93	65	36	10	1,319	1,418	46	1,464	
	Females	1,481	335	166	140	55	32	2,054	2,244	83	2,327	
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	869	176	68	+	+	+	1,135	+	+	+	
	Males	430	61	30	+	+	+	529	+	+	+	
	Females	439	115	38	+	+	+	606	+	+	+	
Hispanic <sup>d</sup>	Both Sexes	1,573	229	237	+	+	+	2,039	+	+	+	
	Males	739	102	68	+	+	+	909	+	+	+	
	Females	834	127	169	+	+	+	1,130	+	+	+	

Estimated prevalence percent<sup>a</sup> on January 1, 2008, of the SEER 11 population diagnosed in the previous 18 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)									Age-Adjusted <sup>f</sup>	
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages	
Race	Sex											
All Races <sup>c</sup>	Both Sexes	0.0098%	-	0.0002%	0.0005%	0.0016%	0.0056%	0.0154%	0.0331%	0.0515%	0.0478%	0.0100%
	Males	0.0097%	-	-	0.0004%	0.0012%	0.0059%	0.0167%	0.0381%	0.0556%	0.0510%	0.0108%
	Females	0.0099%	-	0.0003%	0.0006%	0.0019%	0.0053%	0.0142%	0.0286%	0.0482%	0.0461%	0.0093%
White <sup>c</sup>	Both Sexes	0.0102%	-	0.0002%	0.0005%	0.0016%	0.0052%	0.0154%	0.0340%	0.0514%	0.0477%	0.0100%
	Males	0.0104%	-	-	0.0004%	0.0013%	0.0059%	0.0167%	0.0395%	0.0569%	0.0516%	0.0110%
	Females	0.0101%	-	0.0003%	0.0006%	0.0019%	0.0046%	0.0142%	0.0288%	0.0469%	0.0455%	0.0091%
Black <sup>c</sup>	Both Sexes	0.0083%	-	-	-	0.0022%	0.0066%	0.0182%	0.0342%	0.0514%	0.0500%	0.0106%
	Males	0.0070%	-	-	-	0.0021%	0.0056%	0.0201%	0.0316%	0.0488%	0.0353%	0.0098%
	Females	0.0094%	-	-	-	0.0023%	0.0075%	0.0166%	0.0363%	0.0531%	0.0568%	0.0111%
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	0.0086%	-	-	-	0.0011%	0.0064%	0.0134%	0.0257%	0.0504%	0.0469%	0.0092%
	Males	0.0083%	-	-	-	-	0.0056%	0.0146%	0.0331%	0.0477%	0.0502%	0.0096%
	Females	0.0090%	-	-	-	0.0016%	0.0071%	0.0123%	0.0194%	0.0524%	0.0448%	0.0089%
Hispanic <sup>d</sup>	Both Sexes	0.0045%	-	-	0.0004%	0.0012%	0.0049%	0.0100%	0.0273%	0.0412%	0.0425%	0.0080%
	Males	0.0038%	-	-	-	-	0.0046%	0.0090%	0.0287%	0.0407%	0.0495%	0.0080%
	Females	0.0051%	-	-	-	0.0020%	0.0052%	0.0110%	0.0261%	0.0415%	0.0385%	0.0081%

<sup>a</sup> US 2008 cancer prevalence counts are based on 2008 cancer prevalence proportions from the SEER registries and 1/1/2008 US population estimates based on the average of 2007 and 2008 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.  
<sup>b c d</sup> Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.  
<sup>e</sup> Maximum limited-duration prevalence: 33 years for 1975-2008 SEER 9 data; 18 years for 1990-2008 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).  
<sup>f</sup> Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.  
<sup>g h i</sup> (g) Cases diagnosed more than 33 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <33 and >=33. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.  
 - Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.  
 + Not available.

Table 22.22

## Cancer of the Pancreas (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2004-2008  
Both Sexes by Race

Histology <sup>a</sup>	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native <sup>b</sup>		Hispanic <sup>c</sup>	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	34,274	98.0%	27,914	97.9%	3,718	98.3%	2,319	98.1%	152	96.8%	3,265	97.5%
Epidermoid carcinoma <sup>d</sup> (8051-8131)	63	0.2%	48	0.2%	-	-	-	-	-	-	-	-
Adenocarcinoma <sup>e</sup>	30,041	85.9%	24,509	86.0%	3,249	85.9%	2,009	85.0%	135	86.0%	2,838	84.8%
Adenocarcinoma, NOS (8140)	24,280	69.4%	19,801	69.5%	2,674	70.7%	1,574	66.6%	118	75.2%	2,320	69.3%
Papillary adenocarcinoma, NOS (8260)	60	0.2%	50	0.2%	-	-	-	-	-	-	-	-
Mucinous adenocarcinoma (8480,8482)	995	2.8%	826	2.9%	90	2.4%	72	3.0%	-	-	79	2.4%
Mucin-producing adenocarcinoma (8481)	566	1.6%	453	1.6%	79	2.1%	31	1.3%	-	-	48	1.4%
Infiltrating duct carcinoma (8500-8503,8507,8514)	3,227	9.2%	2,620	9.2%	316	8.4%	266	11.3%	-	-	259	7.7%
Other adenocarcinoma <sup>f</sup>	913	2.6%	759	2.7%	87	2.3%	61	2.6%	-	-	118	3.5%
Other specific carcinomas <sup>g</sup>	2,046	5.8%	1,684	5.9%	204	5.4%	128	5.4%	-	-	191	5.7%
Islet cell carcinoma (8150-8155)	381	1.1%	316	1.1%	32	0.8%	26	1.1%	-	-	27	0.8%
Other carcinomas <sup>h</sup>	1,665	4.8%	1,368	4.8%	172	4.5%	102	4.3%	-	-	164	4.9%
Unspecified, "Carcinoma, NOS" (8010,8020-8022)	2,124	6.1%	1,673	5.9%	258	6.8%	175	7.4%	-	-	232	6.9%
Sarcoma and other soft tissue tumors <sup>i</sup>	28	0.1%	25	0.1%	-	-	-	-	-	-	-	-
Other specific types <sup>j</sup>	25	0.1%	18	0.1%	-	-	-	-	-	-	-	-
Unspecified (8000-8005)	655	1.9%	550	1.9%	57	1.5%	41	1.7%	-	-	76	2.3%
Total	34,983	100.0%	28,508	100.0%	3,782	100.0%	2,363	100.0%	157	100.0%	3,348	100.0%

Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Percents may not sum to 100 due to rounding.

<sup>a</sup> Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

<sup>b</sup> Estimates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>c</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

<sup>d</sup> Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

<sup>e</sup> Adenocarcinoma includes histologies 8050,8140-8147,8160-8162,8180-8221,8250-8507,8514,8520-8551,8560,8570-8574,8576,8940-8941.

<sup>f</sup> Other adenocarcinoma include histologies 8050,8141-8147,8160-8162,8180-8221,8250-8259,8261-8479,8483-8499,8504-8506,8520-8551,8560,8570-8574,8576,8940-8941.

<sup>g</sup> Other specific carcinomas include histologies 8012-8015,8030-8046,8150-8155,8170-8180,8230-8249,8508,8510-8513,8561-8562,8575,8580-8671.

<sup>h</sup> Other carcinomas include histologies 8012-8015,8030-8046,8170-8180,8230-8249,8508,8510-8513,8561-8562,8575,8580-8671.

<sup>i</sup> Sarcoma and other soft tissue tumors include histologies 8680-8713,8800-8921,8990-8991,9040-9044,9120-9136,9150-9252,9370-9373,9540-9582.

<sup>j</sup> Other specific types include histologies 8720-8790,8930-8936,8950-9030,9060-9110,9260-9365,9380-9539.

- Statistic not shown due to fewer than 16 cases during the time period.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Pancreas, by Race and Sex

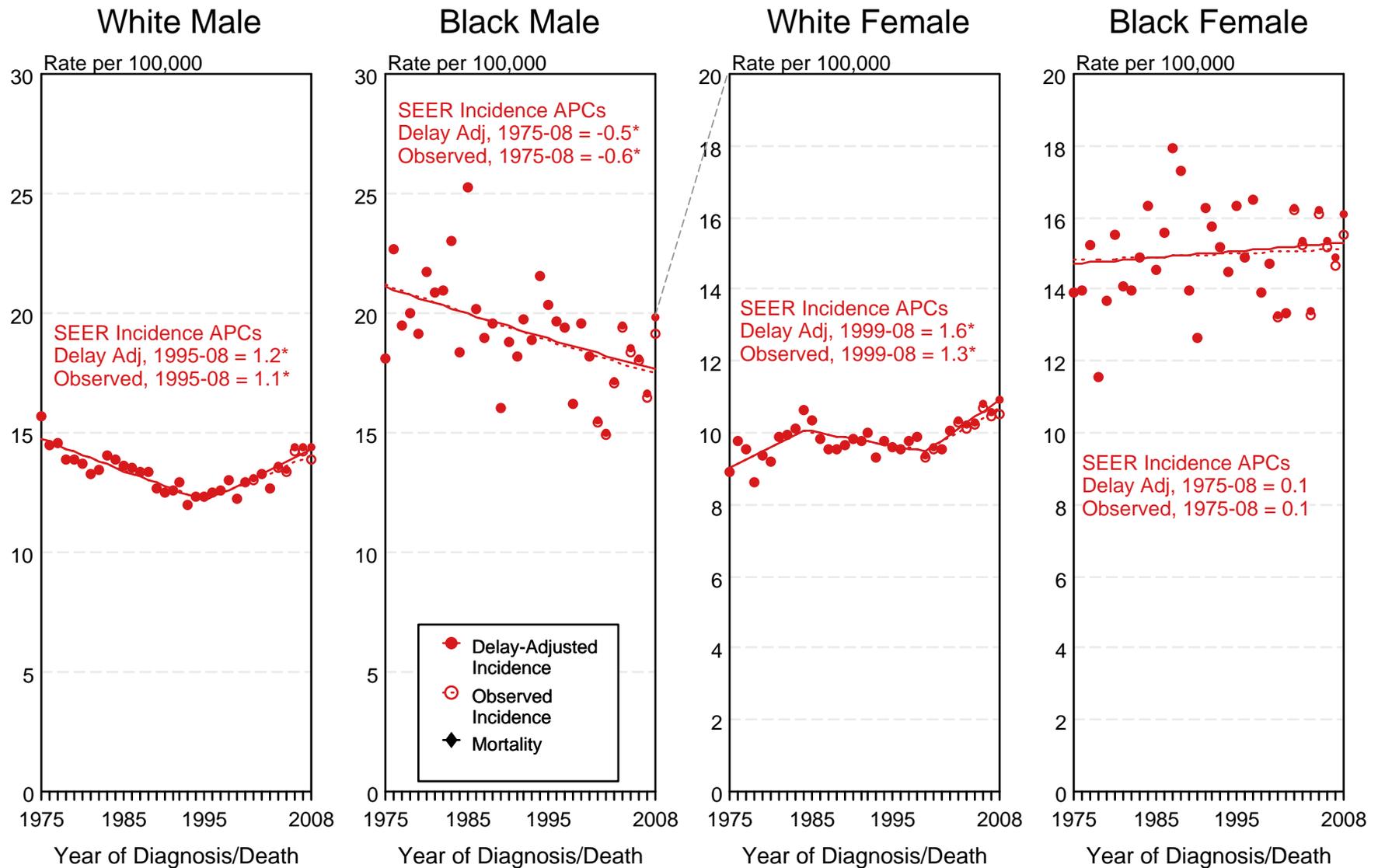


Figure 22.1

<sup>a</sup> Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.  
\* The APC is significantly different from zero ( $p < 0.05$ ).

# SEER Incidence and US Death Rates<sup>a</sup> Cancer of the Pancreas, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2008

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2008

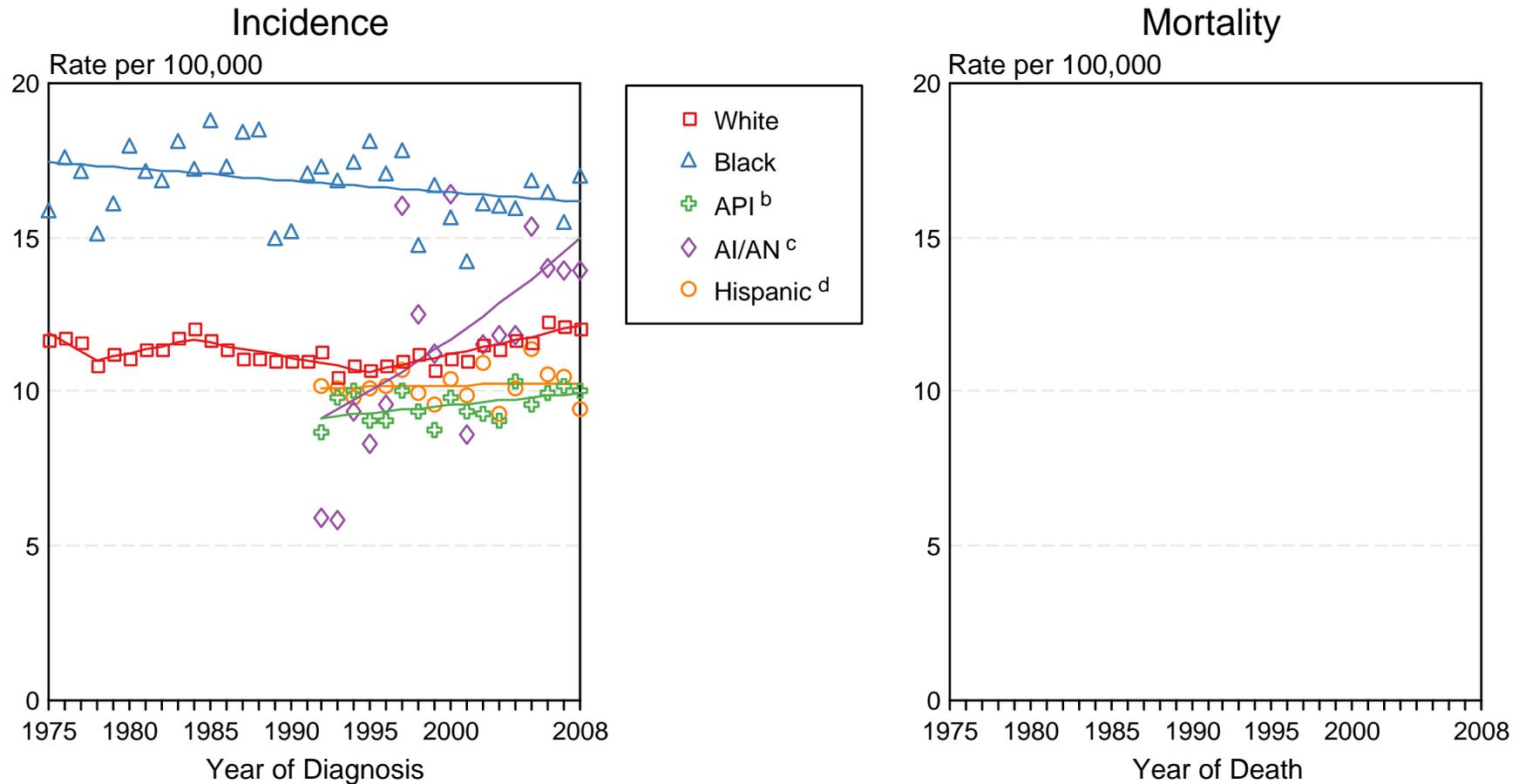


Figure 22.2

Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

<sup>a</sup> Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2008 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2008 allow a maximum of 3 joinpoints.

<sup>b</sup> API = Asian/Pacific Islander.

<sup>c</sup> AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>d</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Pancreas, Male, by Race

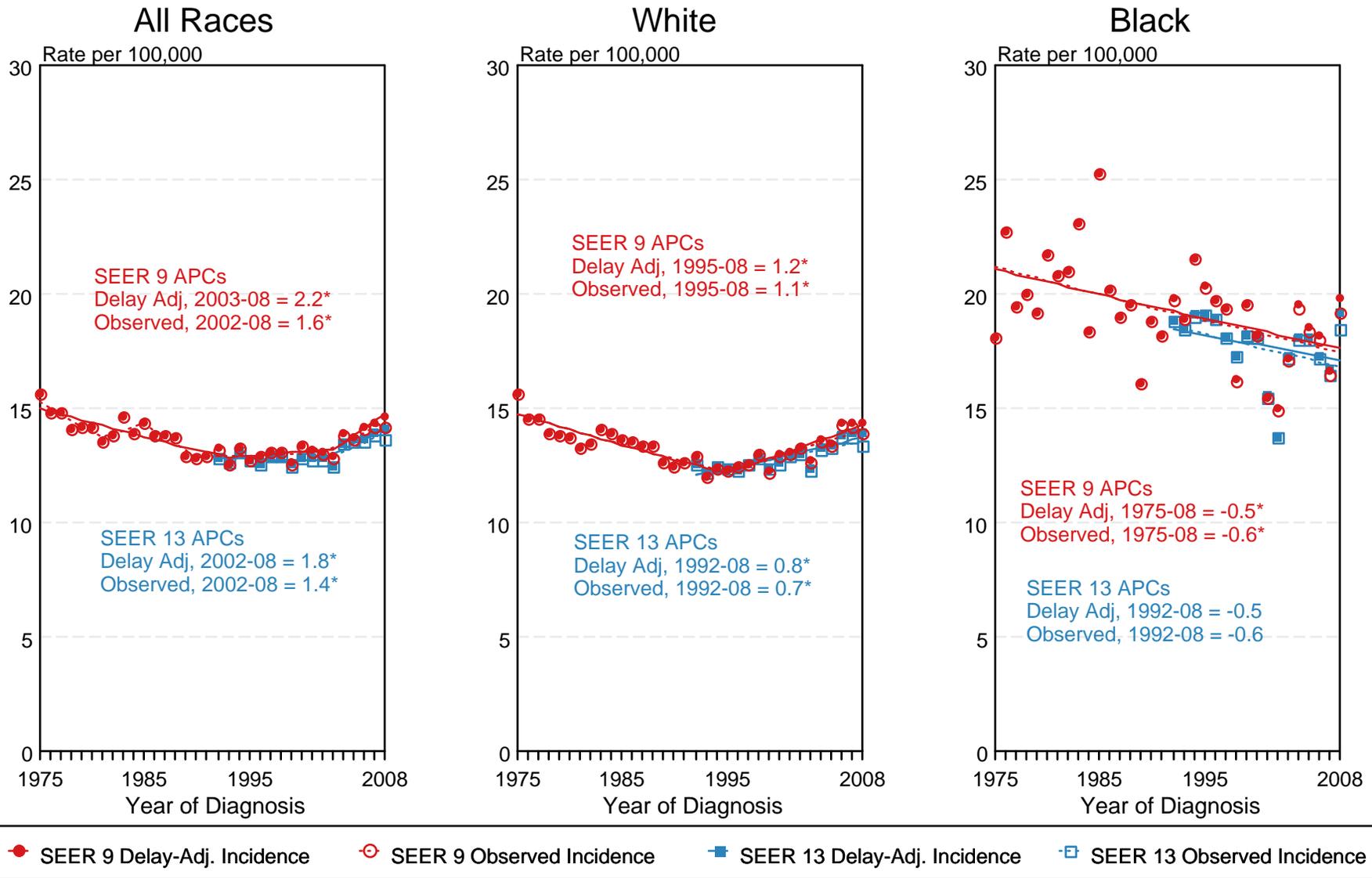


Figure 22.3

<sup>a</sup> Source: SEER 9 areas and SEER 13 areas.  
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).  
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.  
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.  
\* The APC is significantly different from zero ( $p < 0.05$ ).

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Pancreas, Female, by Race

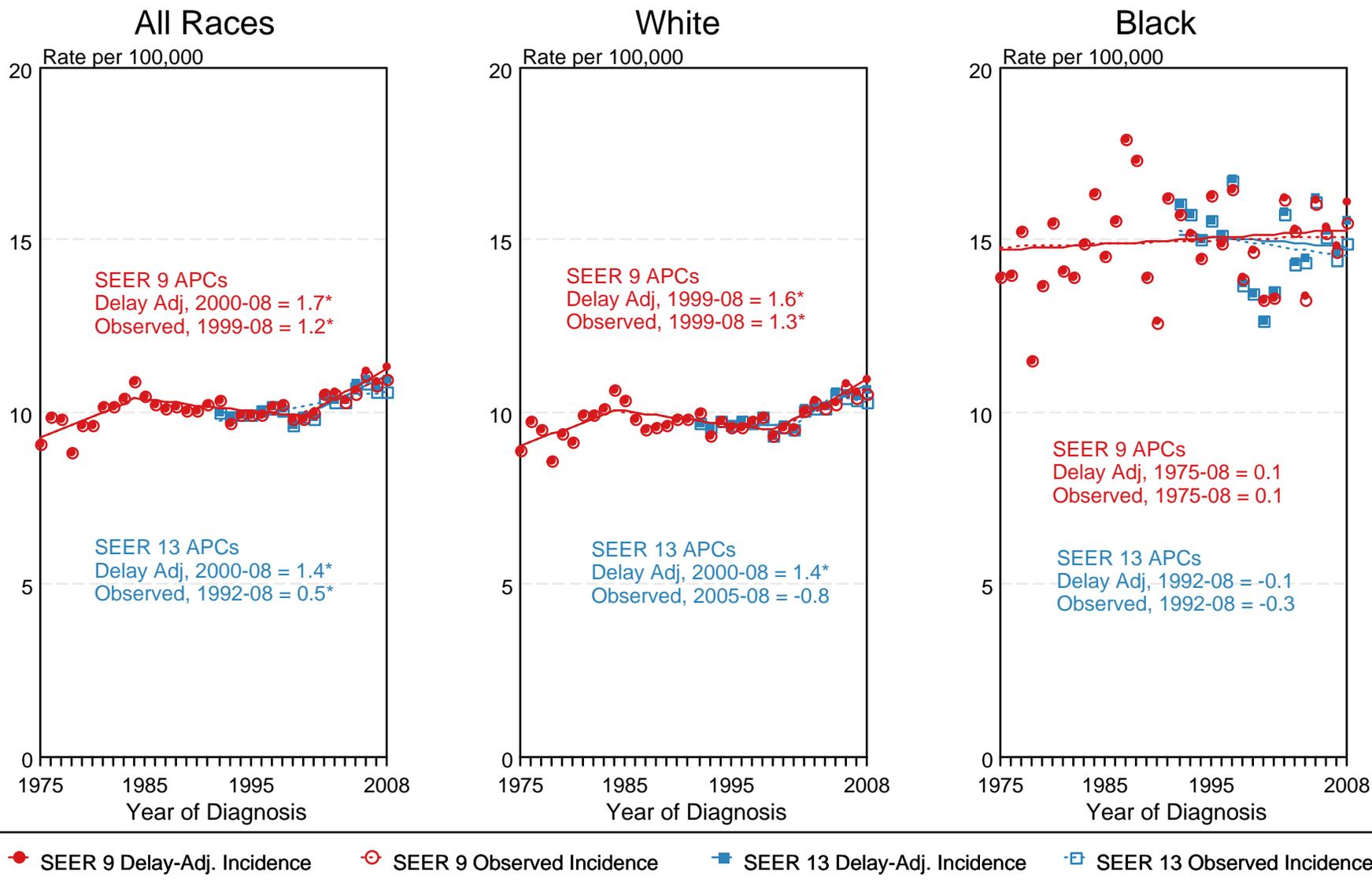


Figure 22.4

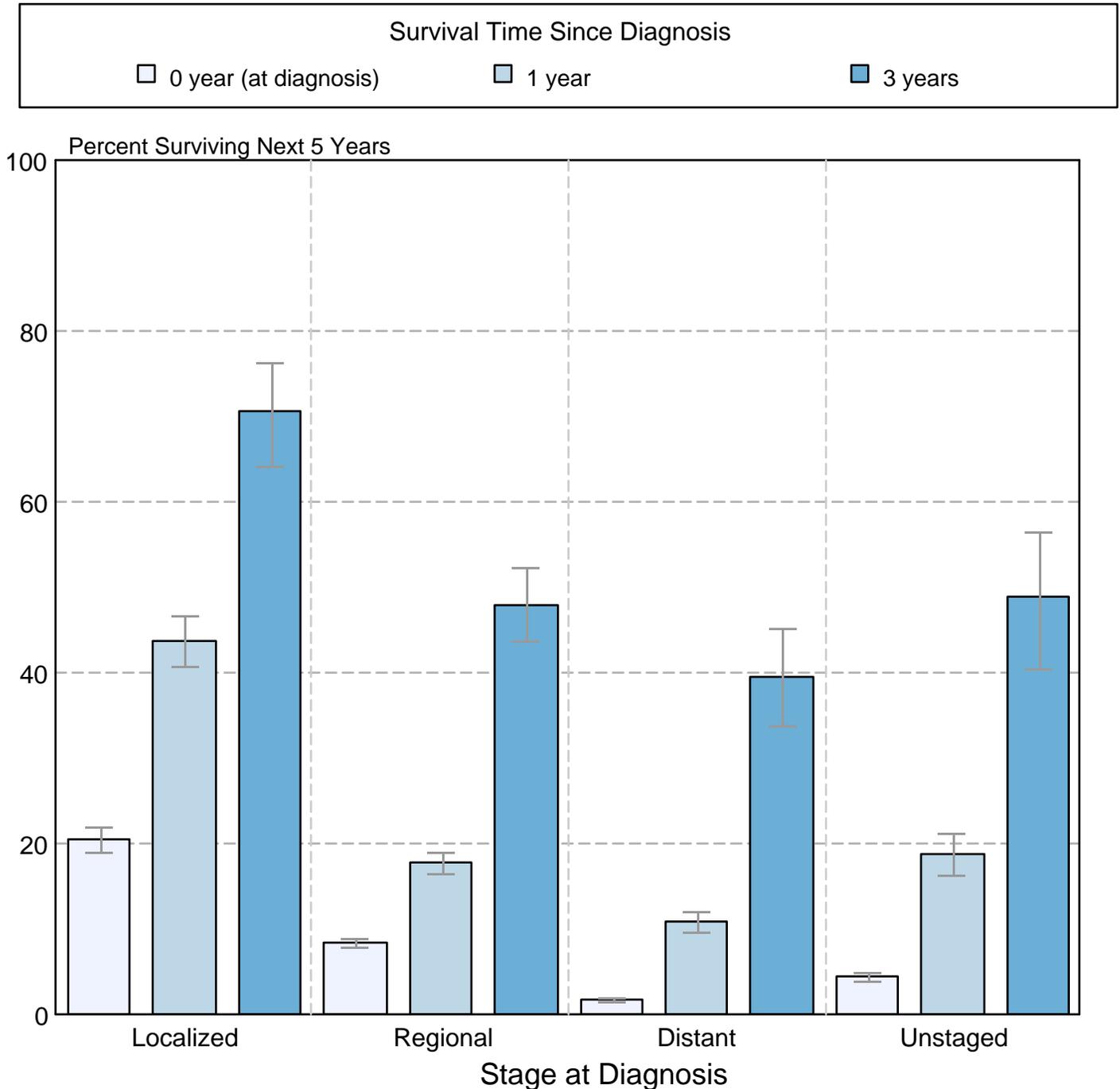
<sup>a</sup> Source: SEER 9 areas and SEER 13 areas.  
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).  
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.  
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.  
\* The APC is significantly different from zero ( $p < 0.05$ ).

Figure 22.5

## Cancer of the Pancreas

### 5-Year SEER Conditional Relative Survival and 95% Confidence Intervals

Probability of surviving the next 5 years given the cohort  
has already survived 0, 1, or 3 years  
1998-2007 by stage at diagnosis



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2007. The remaining 13 SEER Areas contribute cases for the entire period 1998-2007.

Percent surviving is not shown if based on less than 25 cases.

Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.